

Title (en)

METHOD AND DEVICE FOR PUMPING A LASER

Title (de)

VERFAHREN UND VORRICHTUNG ZUM PUMPEN EINES LASERS

Title (fr)

PROCEDE ET DISPOSITIF POUR POMPER UN LASER

Publication

EP 1629576 A2 20060301 (DE)

Application

EP 04735225 A 20040528

Priority

- EP 2004005813 W 20040528
- US 47422703 P 20030530
- CH 18162003 A 20031023

Abstract (en)

[origin: WO2004107514A2] The invention relates to a method and devices for pumping a laser, and to a laser element, which is specially designed therefor and which contains laser-active material. In order to prevent the laser-active material from being subjected to excessive thermal stress, particularly during a thin disk setup, an, in essence, elongated pumped light spot is irradiated onto a laser medium placed on a temperature sink whereby producing a two-dimensional heat flow. This achieves an improved cooling and a reduction of the maximum temperature.

IPC 1-7

H01S 3/06

IPC 8 full level

H01S 3/06 (2006.01); **H01S 3/042** (2006.01); **H01S 3/08** (2006.01); **H01S 5/40** (2006.01)

CPC (source: EP US)

H01S 3/0604 (2013.01 - EP US); **H01S 3/0941** (2013.01 - EP US); **H01S 3/0405** (2013.01 - EP US); **H01S 3/042** (2013.01 - EP US); **H01S 3/0606** (2013.01 - EP US); **H01S 3/0612** (2013.01 - EP US); **H01S 3/0621** (2013.01 - EP US); **H01S 3/08072** (2013.01 - EP US); **H01S 3/08095** (2013.01 - EP US); **H01S 3/094084** (2013.01 - EP US); **H01S 5/4031** (2013.01 - EP US)

Citation (search report)

See references of WO 2004107514A2

Cited by

EP2184818A1; US8750344B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 2004107514 A2 20041209; **WO 2004107514 A3 20050210**; DE 502004002315 D1 20070125; EP 1629576 A2 20060301; EP 1629576 B1 20061213; JP 2006526283 A 20061116; US 2006165141 A1 20060727

DOCDB simple family (application)

EP 2004005813 W 20040528; DE 502004002315 T 20040528; EP 04735225 A 20040528; JP 2006508224 A 20040528; US 55855905 A 20051129